

# Questions and Answers

# Chronic Wasting Disease

## What is Chronic Wasting Disease (CWD)?

CWD is a progressive neurological (brain and nervous system) disease found in deer and elk. The disease ultimately results in death. Species known to be susceptible include elk, moose, mule deer, white-tailed deer, and black-tailed deer. CWD belongs to a family of diseases known as transmissible spongiform encephalopathies (TSEs).

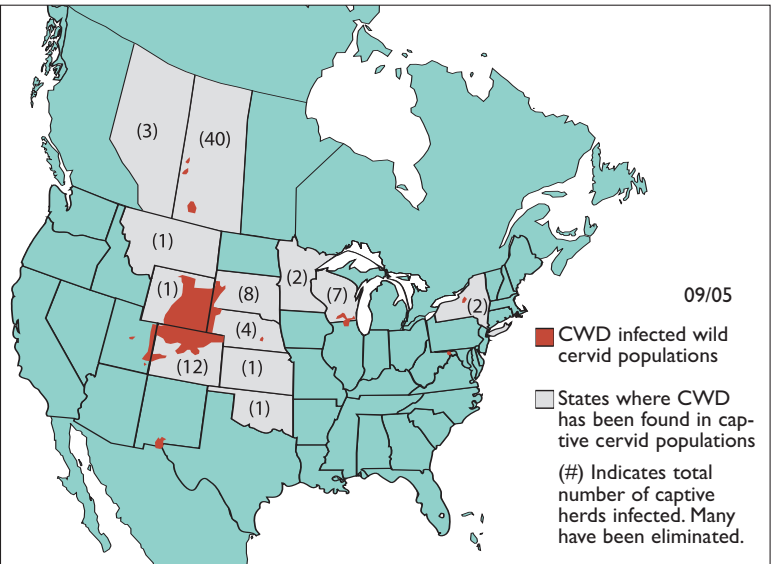
## What causes CWD?

While the agent that produces CWD has not been positively identified, there is strong evidence to suggest that abnormally shaped proteins called prions are responsible.

## Where has CWD been found?

To date, the disease has only been found in deer and elk in North America. CWD is known to occur in free-ranging deer or elk in Alberta, Colorado, Illinois, Nebraska, New Mexico, New York, Saskatchewan, South Dakota, Utah, West Virginia, Wisconsin, and Wyoming. CWD also has been diagnosed in captive deer and elk in Alberta, Colorado, Kansas, Minnesota, Montana, Nebraska, New York, Oklahoma, Saskatchewan, South Dakota, and Wisconsin. See the CWD map below.

## Chronic Wasting Disease in North America



Map adapted from CWD Alliance Web site: [www.cwd-info.org/index.php/fuseaction/about.map](http://www.cwd-info.org/index.php/fuseaction/about.map)

## Does CWD exist in Virginia?

To date CWD has not been found in Virginia. To establish whether CWD occurs in Virginia, the Virginia Department of Game and Inland Fisheries (VDGIF) initiated a CWD surveillance program in fall 2002. This program included testing deer using three different surveillance approaches. These consisted of (a) active random sampling of hunter-killed deer, (b) targeted surveillance of clinical suspect and high-risk animals, and (c) testing of all captive mortalities. The active random surveillance was designed to detect CWD in the free-ranging deer population, even if the prevalence was very low (less than 0.5%). Deer have been sampled from every county in the Commonwealth. Over the past five years, samples collected using all three surveillance approaches from over 1,200 deer in Virginia have all been negative for CWD. Without sampling the entire deer population, Virginia's deer herd cannot be declared absolutely free of CWD. Even so, the Department's surveillance efforts provide a high degree of confidence that CWD is not present in Virginia's deer herd. Also compared to many other states, Virginia lacks several significant risk factors typically associated with CWD; in particular, steps have been taken to address CWD risk factors associated with captive deer in Virginia.

## How is CWD spread?

It is not known exactly how CWD is spread. It is believed that the agent responsible for the disease may be spread both directly (animal to animal contact) and indirectly (soil or other surface to animal). It appears that areas adjacent to CWD-positive wildlife, areas with concentrations of farmed or captive elk and deer, and areas that have received translocated cervids from CWD-infected areas may be at higher risk for introduction of the disease. Furthermore, deer feeding as well as rehabilitation of deer may increase the spread of the disease once it has been introduced into an area. Please note that the Department has proposed to make it unlawful for any person to distribute food, minerals, carrion or similar substances to feed or attract deer from September 1 through the first Saturday in January, both dates inclusive. The risk of CWD transmission through deer urine or other biological attractants used by some deer hunters is unknown.

## Can CWD infect livestock or other wildlife?

There is no evidence that CWD can be naturally transmitted to livestock or other (non deer) animals. Susceptibility of exotic deer species (e.g., fallow deer, reindeer, muntjac, etc.) remains unknown.

## Is CWD dangerous to humans?

The World Health Organization (WHO) and the federal Centers for Disease Control and Prevention (CDC) have conducted investigations for any relationships between CWD and human neurological



disease. These organizations state that there currently is no scientific evidence that CWD has infected humans. However, public health officials recommend that human exposure to the CWD agent be avoided as they continue to evaluate the potential risk, if any.

## How can you tell if a deer has CWD?

In early stages of infection, animals do not show any symptoms. The incubation period can range from about 12-18 months up to 3-5 years. In later stages, infected animals begin to display abnormal behavior such as staggering or standing with very poor posture. Animals may have an exaggerated wide posture or carry the head and ears lowered, and may drool. Infected animals become emaciated (thus the name wasting disease) and appear in very poor body condition. Clinical symptoms are typically not seen in deer younger than 18 months of age. CWD symptoms may also be characteristic of diseases other than CWD (e.g. deer with bacterial brain abscesses or chronic Hemorrhagic Disease).

## How is CWD diagnosed?

The only way to make a definitive diagnosis is to examine the brain and lymph nodes in a laboratory. There is no certified live-animal test, and there is no vaccine or treatment for CWD.

## What should I do if I see a deer that shows CWD symptoms?

Do not attempt to contact, disturb, kill, or remove the animal. You should accurately document the location of the animal and immediately contact the VDGIF at 1-804-367-1258 or the office listed below that is nearest to you. Arrangements will be made to investigate the report. Offices are located in Blacksburg (540) 961-8304, Farmville (434) 392-9645, Fredericksburg (540) 899-4169, Lynchburg (434) 525-7522, Marion (276) 783-4860, Verona (540) 248-9360, and Williamsburg (757) 253-7072.

## What precautions should Virginia deer hunters take?

Concern over CWD is no reason not to enjoy the upcoming deer hunting season. The Department advises that hunters may wish to follow these simple recommendations:

- Do not shoot, handle or consume any animal that is abnormal or appears to be sick. If you see a sick deer, please contact the Department immediately.
- Wear latex or rubber gloves when field dressing your deer carcass.
- Bone out meat from your animal. Do not saw through bone and avoid cutting through the brain or spinal cord (backbone).
- Minimize the handling of brain and spinal tissues or fluids.
- Wash hands and instruments thoroughly after field dressing is completed.
- Avoid consuming brain, spinal cord, eyes, spleen, tonsils, and lymph nodes of deer. Normal field dressing coupled with boning out a carcass will remove most, if not all, of these body parts.
- If you have your deer commercially processed, request that your animal be processed individually, without meat from other animals being added.

*Note: these bullets are adapted from the CWD Alliance Web site.*

## As a deer hunter, what should I do if I kill a severely emaciated deer or a deer that is obviously sick?

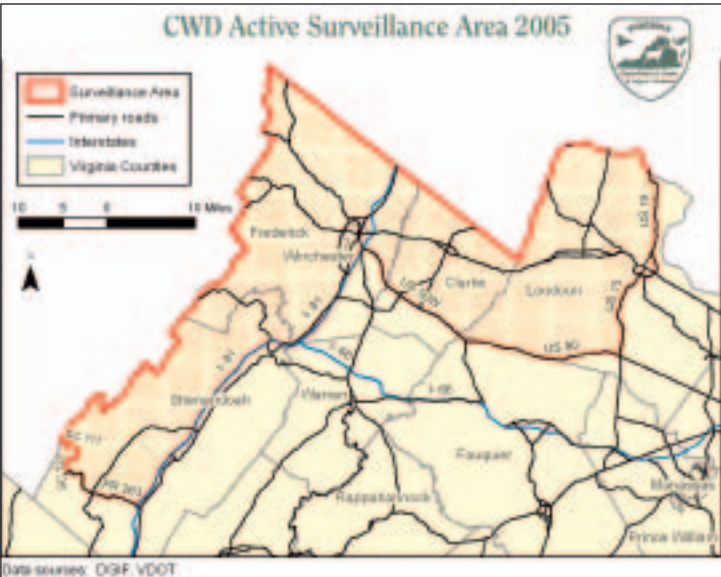
Contact one of the Department offices as noted previously.



## What is being done about CWD in Virginia?

To be proactive and protect Virginia's deer resource, hunting economy, and the public, the Department has taken the following CWD management actions:

- VDGIF changed the regulations and permit conditions to ban the importation of live deer and elk into Virginia. Furthermore, a permit is required for the possession of captive deer and the intrastate movement of captive deer is also banned.
- Captive deer requirements related to animal marking, record keeping, facility inspections, and mortality reporting have also been strengthened. The Department conducts ongoing CWD monitoring of captive deer and elk in Virginia.



- CWD surveillance will continue with an emphasis on targeted surveillance of clinical suspect and high-risk animals. In addition, any illegally possessed or imported deer and other high-risk animals will be euthanized and tested for CWD.
- We are also concerned about the possible spillover of CWD from neighboring states, especially, since CWD has been discovered in Hampshire County, West Virginia. As a result of this discovery we will be conducting active random surveillance in an area that includes portions of Shenandoah, Frederick, Clarke and Loudoun Counties (see map). Hunter and road-killed deer in the surveillance area will be tested for CWD.
- The Department is committed to providing accurate and timely information about CWD to deer hunters and the general public through news releases, pamphlets, magazine articles

and other media outlets. Department staff also closely monitors the CWD status in other states as well as new information and developments as they emerge.

- Finally, in the event that CWD is discovered in Virginia we have developed a response plan that is designed to define the magnitude and geographic extent of the outbreak and control the transmission of the disease.

The Department will not let its guard down with regard to CWD. We ask that all Virginians continue to be vigilant and work to keep CWD out of Virginia.

## What about importing deer carcasses into Virginia from other states?

The primary objective in the management of CWD is to prevent its spread into new areas. One possible mode of disease transmission is by the importation of infected carcasses. In an effort to minimize the risk of disease spread, a number of states have adopted regulations regarding the interstate transportation of hunter-harvested deer and elk. The most common regulation is prohibition of the importation of whole carcasses harvested from CWD areas. Some states, like Colorado, also have established regulations addressing the transport of deer and elk out of CWD areas. Generally, states that have adopted carcass transportation regulations do not allow the importation of any brain or spinal column tissue and allow transport of only the following materials:

- Boned out meat that is cut and wrapped (either commercially or privately).
- Quarters or other portions of meat with no part of the spinal column or head attached.
- Hides and capes with no heads attached.
- Clean (no meat or tissue attached) skull plates with antlers attached.
- Antlers with no meat or tissue attached.
- Upper canine teeth, also known as “buglers,” “whistlers,” or “ivories.”
- Finished taxidermy products.

The following states and provinces have adopted some form of carcass transportation regulations: California, Colorado, Illinois, Iowa, Kentucky, Manitoba, Michigan, Minnesota, North Dakota, New Mexico, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Washington. Since these regulations are continually evolving, it is recommended that, before hunting, you check the CWD regulations in your home state, the state in which you will be hunting, and states in which you will travel through en route home from your hunting area. Most state

wildlife agencies provide regulations information on their Web sites and may be accessed through the CWD LINKS page on the CWD Alliance Web site.

Please note that VDGIF has proposed deer carcass importation regulations. In the meantime, the Department requests that any Virginia hunter deer hunting in a state or province where CWD has been identified in free ranging or captive deer (Alberta, Colorado, Illinois, Nebraska, Kansas, Minnesota, Montana, New Mexico, New York, Oklahoma, Saskatchewan, South Dakota, Utah, West Virginia, Wisconsin, and Wyoming) follow the above recommendations.

## What should I do if I find out a deer or elk I killed had CWD?

Each year numerous Virginia residents, go deer or elk hunting in states that have CWD (Alberta, Colorado, Illinois, Nebraska, New Mexico, New York, Saskatchewan, South Dakota, Utah, West Virginia, Wisconsin, and Wyoming). As noted previously, the Department requests that any Virginia hunter hunting in a state or province where CWD has been identified follow the carcass importation recommendations.

Many of these states have mandatory or voluntary CWD testing programs. If you have your deer tested for CWD and are notified by mail, e-mail, or telephone that the CWD test was positive and you have brought any part of the carcass back to Virginia, please contact the Department immediately at 1-804-367-1258. VDGIF has proposed the mandatory reporting of CWD positive test results to the Department within 72 hours. The Department may then take into possession any imported carcass or carcass parts that originated from a CWD positive animal.

## What should I do to find out more about CWD?

Persons wanting more information on CWD are advised to visit the following websites:

- Virginia Department of Game and Inland Fisheries ([www.dgif.virginia.gov](http://www.dgif.virginia.gov))
- Chronic Wasting Disease Alliance ([www.cwd-info.org](http://www.cwd-info.org))
- Southeastern Cooperative Wildlife Disease Study ([www.uga.edu/scwds/briefs.htm](http://www.uga.edu/scwds/briefs.htm))
- United States Department of Agriculture, Animal Plant Health Inspection Service ([www.aphis.usda.gov/vs/naahps/cwd](http://www.aphis.usda.gov/vs/naahps/cwd))



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Virginia Department of Game and Inland Fisheries